LC
1011
K4



HIGHER EDUCATION IN THE UNITED STATES OF AMERICA

By

CHANCELLOR J. H. KIRKLAND



Reprinted from the Vanderbilt University Quarterly

1913

LC1011
K4

UNIV. OF
CALIFORNIA

UNIV. OF CALIFORNIA

HIGHER EDUCATION IN THE UNITED STATES OF AMERICA.*

BY CHANCELLOR J. H. KIRKLAND.

My theme has essential limitations: in subject matter, to colleges and universities; in time, to the life period of the American republic. A strict adherence to these limits is hardly possible. There can be no consideration of higher education without a conscious background of other educational agencies and forces with which higher education is closely connected. Again, the college of the American Revolution can be understood only by reference to the educational history of one hundred and fifty years preceding. But still there is a justification for my theme, and it has in itself a certain unity and definiteness. It was not a great while after the Revolutionary War until American colleges developed a type different from that of the colonial period. This type of institution we shall discuss under the title of "The Old College." From about the year 1870 to the present we have seen the extensive development of the New American College, and during the same period occurs the evolution of the American University. It is, therefore, under these three general heads that I shall treat my subject. But we cannot omit a passing reference to conditions antedating the Revolution.

The Colonial College.

The older type of the American college was itself the outgrowth of the colonial college. Before the Revolutionary War eleven institutions of higher learning had been founded, and

*Expanded from an address delivered February 28, 1912, on the one hundred and twenty-fifth anniversary of the founding of the University of Pittsburgh.

267673

THE LIBRARY OF THE UNIVERSITY OF CALIFORNIA

there had been a continuous history and development of higher education in the colonies for nearly one hundred and fifty years. The point of beginning was the institutional life already familiar in the home beyond the seas. Harvard College was a combination of an English public school and Emmanuel College. It was established because the colonists desired to perpetuate in their new home the essential features of their former life. It was, therefore, a kind of professional school to train leaders for the new colony, especially ministers for the Church. Requirements for admission in these earliest institutions were confined at first to Latin. When Greek was added, it included grammar and readings from the New Testament. Mathematics was not specified at first, but later comprised arithmetic and the rule of three. Pupils were prepared for college privately, in the grammar schools, or in the colleges themselves. Indeed, the colleges were at first half schools. Harvard was founded as the "schoole and colledge at Newtown," Yale as a "Collegiate Schoole," and Dartmouth grew out of Dr. Wheelock's school for the Indians.

These first colleges had small financial resources. The General Court of the colony voted four hundred pounds for the establishment of Harvard, and this was considered sufficient. The annual income was derived from the ferry between Charlestown and Cambridge and from an appropriation of one hundred pounds by the court. Yale was founded on almost nothing. As late as 1726 its annual budget was three hundred and fifteen pounds, nothing of which came from endowment. Harvard's total funds in 1776, after a century and half of history, were less than £17,000. Records are preserved of benefactions as small as a few shillings, or a number of sheep, a pewter flagon worth ten shillings, a sugar spoon, and a "silver tipt jug." William and Mary was the richest of our earliest colleges. To this institution the king and queen subscribed £2,000. Large tracts of land were also given and income from public revenues. The annual income above student fees was probably as much as £2,000. But

this was quite exceptional. The first money raised went into buildings of the simplest character. William Tennent's log college had a reputation that extended even across the waters. Harvard's first building was a small wooden structure, which was by 1677 completely dilapidated. In 1719 Yale put up a most ambitious structure of wood, but having three stories and containing chapel, library, dining room, and bedrooms for twenty students. William and Mary enjoyed the distinction of possessing a handsome brick edifice one hundred and thirty-six feet in length, whose architect was Sir Christopher Wren. Still more pretentious was Nassau Hall, built as Princeton's home in 1757. This was the largest stone building erected in America before the Revolutionary War.

These institutions had each collected a few hundred volumes, and this was known as the library. Scientific apparatus was unneeded and unknown. It was an hour of much importance when in 1734 the trustees of Yale College secured contributions amounting to £37 for the purchase of scientific apparatus.

The avowed purpose of these earliest colleges was the training of leaders for the Christian ministry. The charter of William and Mary stated as the prime object of the college that the Church of Virginia might be furnished "with a seminary of ministers of the gospel." Even as late as 1753 the General Assembly of Connecticut resolved "that one principal end proposed in erecting the college was to supply the Churches in this colony with a learned, pious, and orthodox ministry." One-half the graduates of Harvard for the first hundred years entered the ministry. In 1696 a list was made of one hundred and sixteen pastors in New England, and of these one hundred and seven were Harvard graduates. The curriculum was shaped to meet this need. Hebrew and other Oriental languages had a place, also the Greek Testament, logic, philosophy, and divinity. This last subject fell naturally to the president, who was usually an eminent minister. At Harvard the president was the sole instructor until Henry

Flint was appointed first tutor in 1699. When Dr. Clap began his great career as president of Yale in 1739, the whole instruction of the senior class was in his hands, while the other classes were committed each to one tutor.

Changes in the above curriculum were slow and slight during the long years of our colonial history. The course in mathematics was gradually extended. At the end of the period in 1777 Yale freshmen were studying arithmetic, the sophomores algebra and geometry, and the juniors trigonometry. Dr. Clap in earlier years had shown an inclination to improve the curriculum in mathematics and natural science. Speaking of his juniors, he says: "Many of them understand surveying, navigation, and the calculation of eclipses, and some of them are considerably proficient in conic sections and fluxions." Perhaps it was this trend toward practical learning that caused Lewis Morris, father of Gouverneur Morris, in his will of 1760 expressly to forbid that his son be sent for his education to the colony of Connecticut, "lest he should imbibe in his youth that low craft and cunning so incident to the people of that country, which is so interwoven in their constitutions that all their art cannot disguise it from the world, though many of them under that sanctified garb of religion have endeavored to impose themselves on the world for honest men."

The great service of these early colleges has been recognized by every historian and is manifested in their influence on our national history. This has been well expressed by Professor Snow in a recent work on "The College Curriculum in the United States": "The closer we study the lives and circumstances of the first college builders, the greater seem their tasks. With no resources but an unconquerable hope, in a wilderness newly cleared, where civilization groped its way, they successfully reared in barren fields their rough-hewn buildings and laid the foundations of our collegiate education. What was then done in New York, in Elizabethtown, in Philadelphia, in Williamsburg, on the banks of the Connecticut, and on the shores of the Charles has been

felt not only in the institutions in these places established, but has influenced the whole course of our collegiate history through the length and breadth of the land."

Days of Transition.

The Revolution brought days of trouble for the colleges. Work was interrupted, buildings in some cases destroyed, their connection with the mother country broken, and the difficulty of securing teachers and books increased. But at the same time came the dawning of a new day. The colleges were thrown more directly on the hearts of the American people, a new and wider field of service opened before them; they were to become the expression of a new national feeling, the exponent of a new political theory. Their field of service altered materially. They were to train, not leaders for the Church alone, but leaders for a new State, for an active, vigorous people, for a commercial life beginning to express itself anew, for a period of pioneer development that was sweeping over the Alleghanies into the Middle States, into the South, the Central West, and beyond the "Father of Waters," farther and yet farther toward the Golden Gate of the Western sea. And so we find the old colonial colleges rapidly rehabilitated and a number of new ones founded. Some of these were Dickinson College, Williams College, the College of Charleston, Washington College in Maryland and in Tennessee, and several academies that afterwards grew into colleges or universities, like the Pittsburgh Academy, whose birth we celebrate to-day. The States also began to assume larger responsibility in this work. The University of North Carolina was chartered in 1795, followed by Vermont in 1800, Georgia in 1801, and South Carolina in 1805. The spirit of the times was manifested in the provisions expressed in the charter of Hampden-Sidney College: "And that, in order to preserve in the minds of the students that sacred love and attachment they should ever bear to the principles of the present glorious Revolution, the greatest care and caution shall be

used in electing such professors and masters, to the end that no person shall be so elected unless the uniform tenor of his conduct manifests to the world his sincere affection for the liberty and independence of the United States of America."

During these years of commonwealth-building there was a very general interest in higher education. This was manifested in several independent movements. First, we note the efforts of individuals and communities directed to the upbuilding of older institutions and the founding of new ones. As supplementary to the work of colleges many academies were established about this time, and these played an important part in educational history for many years. In the second place, the States began a definite policy of establishing and supporting universities which has continued unbroken until the present time. In the third place, the national government made substantial contributions to education in general. These contributions largely influenced the attitude of the individual States, particularly in the Middle West. And yet with all these efforts combined the colleges of the new American republic increased slowly in resources and held uniformly to a conservative policy on all questions of administration. Dr. Thwing estimates that the whole amount of the productive funds of all the colleges at the beginning of the nineteenth century was probably less than $500,000. Dexter estimates that in 1800 all existing colleges in the country had less than two thousand students, hardly more than one hundred professors, and $1,000,000 worth of property.

The Old American College.

The first period into which we have arbitrarily divided our sketch of higher education extends from the beginning of the nineteenth century till about 1870. In this period the old-fashioned college labored and flourished—an institution peculiar to America, one which took a firm hold on our social life and thought and has endeared itself to all classes of our citizens. The name

of the institution was not significant; it might be college or it might be university; there was no difference in substance. State institutions as a rule preferred the more ambitious title, and some of them in the course of time justified their name by a wider circle of professional schools, but this was not an essential part of the original plan. All these colleges developed along similar lines and grew into one type. There was large uniformity in admission requirements and in the content of the curriculum. The degree of A.B. was given after four years of work. The course of study was rigidly prescribed, based on Latin and Greek as fundamentals, to which were added English literature and rhetoric, mathematics, logic, and philosophy, with a small amount of science, generally known as natural philosophy, and a little history. Requirements for admission in the beginning of this period hardly differed from those of the colonial colleges, but were gradually increased as the years went on. In 1820 the modern subjects of English geography and algebra were seeking recognition. Yale made algebra a requirement in 1847, and Princeton did so in the following year. Geometry was required for the first time at Harvard in 1844 and history in 1847. Between 1800 and 1870 eight new subjects were introduced into the admission requirements—viz., geography, English grammar, English composition, algebra, geometry, ancient history, United States history, and physical geography. During most of the time of which we are speaking we may properly think of the admission requirements as covering Cæsar, Vergil, Cicero in Latin, the Anabasis and two books of the "Iliad" in Greek, and in mathematics algebra to quadratics, with two or three books in geometry. Students completed this course and entered college at fifteen or sixteen years of age, about two years younger than at present.

Not many years passed before questions were raised as to the wisdom of the existing curriculum, and college officers were forced to rally in its defense. One of the most elaborate of these discussions was embodied in a report made by the Yale faculty in

1827 and discussed at length in Professor Snow's recent work on the college curriculum. As Professor Snow says: "It was long quoted in the institution itself as a final statement of what the aim of education should always be, and from the number of younger institutions which were established under its influence we can gather how powerful it was in forming public opinion on the subject of the proper curriculum." This report fixes the value of the college course on the basis of *discipline*. As President Day puts it: "The two great points to be gained in intellectual culture are the discipline and furniture of the mind. The former of these is perhaps the more important of the two." This was, of course, no new discovery in educational theory, but the occasion for its recognition was new. It was this mental discipline that was constantly put forward in college catalogues as the thing of greatest value to be secured by every student. The method of attaining this was by selecting a few definite subjects from the whole field of knowledge and teaching these mechanically out of poorly prepared textbooks.

But little is heard of the college in those days as a professional school. Its value in these respects was declining. It was insufficient for the training of ministers. Much of the colonial requirement in Hebrew, New Testament Greek, and divinity studies had passed out of vogue. Special theological seminaries were being established—twenty-one before 1825. A chasm was opening up between general and special training, between culture and vocational studies. The college staked its existence on the value of intellectual discipline, and won a complete victory, at least for a term of years. In the character of students also a change was in progress. As the curriculum became less professional, other walks of life furnished a larger proportion of students. Class distinctions, perpetuated from English society, were broken down by the Revolution, and opportunities for culture and advancement were claimed by every free-born American citizen. The drift of things in all these years was toward a dead level and a machine-

made product. Mechanism was substituted for life. The close personal touch of the professors and tutors with individual students gave way to faculty government, to a system of marks and demerits, to a wide freedom of personal life and thought, with a rigid discipline in class work. Not only the textbooks but the exact number of pages are set forth in catalogues and reports.

We note the fact that this limitation of college life is in contrast with the political development of the new republic. Doctrines of independence, of individual rights and privileges, of equality are less in accord with the educational development of the old-fashioned college than with the changes that were introduced later. Possibly educational theory in this case followed educational practice. Colleges taught what they were able to teach. Limitations of resources, books, and men confined them within very narrow limits, and it was easier to justify their curriculum than to change it.

But educational institutions and methods must at last reflect the larger life about them, and so the ideals and methods of the old college felt the impulses that were transforming our national life in this period. In these movements I single out three of great prominence: (1) Territorial enlargement, (2) scientific and commercial expansion, (3) the growing spirit of democracy.

1. The territory actually settled and possessed at the time of the American Revolution was a narrow strip along the Atlantic Seaboard. The area was about 700,000 square miles; the population less than four millions. Dr. Albert Shaw says: "If you would know your own country in its most essential things, you must study the movement by which the descendants of the old original commonwealths spread themselves across the continent through a period of one hundred years or more, beginning, let us say, about 1785." The development of the Middle States during the years following the War of 1812 was thrilling. Towns sprung up in a few months or years through Ohio and Indiana. The highways from New York and Pennsylvania were crowded.

Within six years (1810-16) the population of Ohio changed from two to four hundred thousand, and of Indiana from twenty-four thousand to seventy thousand. Ferries were kept busy every day transporting travelers across the great streams. To those who lived on the line of march it seemed as if the Atlantic States were to be depopulated, and this loss became a matter of serious consideration in these older States. As a result of this movement educational institutions were established in great numbers in our Middle and Western territory, and some of them exercised a distinct influence even on the older institutions of the East.

2. A discussion of the commercial and mechanical development of the first half of the nineteenth century would fill a volume. It was the age of steam and of steel, the age of railway-building and of factory-building and of city-building. It was the age of inventions and discoveries, some of which, like the cotton gin, turned the current of history. It was the age when chemistry began to revolutionize life and industry. It was the age of commercial reorganization, when corporations began to be founded and to weave their bonds for weal or woe around our whole social structure. These things had by inevitable law a direct and forceful influence on university history.

3. It was also an age of growing democracy. The adoption of the Constitution and the winning of the War of Independence did not end the struggle for personal freedom. Not all who participated in that early struggle were converts to the democratic ideal. "Gouverneur Morris, one of the framers of the Constitution, declared that democracy was not the worst form of government, but was no government at all." Many of the Federalist party had little sympathy with ultra-democratic tendencies. Fisher Ames, of Massachusetts, wrote: "Our country is too big for union, too sordid for patriotism, too democratic for liberty. What is to become of it, He who made it best knows."

With these views the political creed of Jefferson stands in marked contrast. He believed in the people, and he believed the

greatest privilege and duty of the State and of society to be the uplift of the common man. Quoting the words of Professor Hazen in a late number of the *American Educational Review:* "This broad and, if you choose, sometimes fantastic humanitarianism, this fervid belief in the masses, the poetic vision of the future —this is the great glory and honor of Jeffersonian Democracy, its sufficient, its radiant historic justification."

The march of events was along the line of Jefferson's prophetic vision. In 1835 De Tocqueville published his "Democracy in America," in which, without enthusiasm but with clearness and fairness, he pictured the social movement, transcending human control, marching with the certainty of fate toward a resistless democracy. President Butler says in his "True and False Democracy": "Through all the pages of these writers runs an expression of the conviction that the stream of tendency toward democracy can neither be turned back nor permanently checked. Some of these students of democracy are its enthusiastic advocates, others are its hostile critics; all alike seem to resign themselves to it."

With this belief in human rights grew the belief in education as an obligation of society, as the most valuable asset of individual wealth, as a mark of personal worth, as a means to the realization of personal character. All this mightily affected our educational history, from the elementary schools even through the greatest university, and its influence is not yet exhausted.

Let us now consider the effects of this political, social, and scientific development on the American college.

First of all, it caused men to see the defects of the existing system, and with this vision came efforts to correct and improve. We have already mentioned the decline of the college as a school for professional training. This led to the establishment of special institutions for training in theology, medicine, and law. But this tendency went still farther. As knowledge increased there was found need of expert scientists, and technical schools of varied

character were brought into being to meet this need. The deficiencies of the college curriculum became also more apparent as the world grew larger. Old subjects demanded expansion and new subjects clamored for admission. The curriculum became uncomfortably crowded, and this produced superficial work. The great F. A. P. Barnard in an address delivered at the University of New York in 1855 before the American Association for the Advancement of Education said: "Considered from a merely educational point of view, the additions must be pronounced to be uncalled for and unnecessary." Evidently Dr. Barnard was under the spell of the theory that identified a college education with mental discipline. Dr. Wayland in 1842 comments on the crowding of the curriculum with new subjects: "It is manifest that we might under these circumstances multiply officers until the whole system would be a perfect nuisance." He was of the opinion that the intellectual output of the colleges was less satisfactory than before the Revolution. To meet the difficulty he suggests: (1) Raising the requirements for admission; (2) introduction of new subjects with great liberality and the forming of parallel courses leading to B.S. or B.L. instead of A.B., with M.A. reserved for higher and additional attainments. To show the growing claims of the new learning, I quote a passage from a circular written by Philip Lindsley soon after he became President of the University of Nashville, a position he accepted in 1824 after declining the presidency of Princeton: "To the farmers the trustees principally direct their regards. To elevate agriculture to the first rank among professions and occupations is their aim. They have already expended $20,000 in the purchase of philosophical apparatus, a mineralogical cabinet of 10,000 specimens, a museum of natural history, and in furnishing a well-constructed chemical laboratory, besides employing able professors in every branch of physical and experimental science, so that the young farmer may become an accomplished scientific agriculturist. Here, too, in like manner the youthful mechanic, merchant, or manufacturer may have

the privilege of learning whatever will be advantageous to their several vocations. Youth, therefore, may be amply qualified here either to enter upon the study of a learned profession or to engage in any useful business or employment."

The most notable deviation from current educational systems was the plan adopted in the founding of the University of Virginia. Without entering into elaborate details, I may quote the following analysis of Jefferson's views made by Prof. H. B. Adams:

"1. The abolition of a prescribed curriculum for all students, and consequently the overthrow of the class system.

"2. The introduction of specialization, or, as Jefferson phrased it, 'exclusive application to those branches only which are to qualify them (students) for the particular vocations to which they are destined.'

"3. The elective system, or 'uncontrolled choice in the lectures they shall choose to attend.'

"4. The reduction of discipline to a minimum, 'avoiding too much government by requiring no useless observances, none of which shall here multiply occasions for dissatisfaction, disobedience, and revolt,' etc."

Change from the Old College to the New College.

Let us consider now somewhat more systematically the changes by which the old college has been transformed into the new. This brings us at once into modern times; for while there were advance movements in earlier days, the general transformation of the American college has been the work of the past forty years. The special changes I have in mind may be enumerated concisely as follows:

1. The requirements for admission have been both elevated and systematized. This has been made possible only through the development of the public high school. Since 1870 new subjects have been generally added as follows: Modern languages, English

literature, English composition, and natural science. Instead of the old system of required subjects, a certain number of electives became necessary even at the college door. This led to the adoption of the point system, which was the forerunner of the present system of units. The method of admitting students from accredited schools came into vogue first with the State universities of the Middle West, and bids fair finally to win out over all other methods of admission.

2. With the changes in requirements for admission the age of freshmen has increased, and there have also been brought about for other reasons marked changes in student life and government.

3. The course of study has been greatly enlarged. This has brought about a general system of electives or a system of parallel courses. More has been done in this direction since 1870 than was done in the two hundred and fifty years preceding that date. The extreme to which this tendency may go was seen in the adoption by the trustees of Cornell University of a phrase of Ezra Cornell as a kind of motto: "I would found an institution where any person can find instruction in any study." Though this ideal has not been reached at Cornell or elsewhere, it has been approximated at a number of institutions.

4. While the infinite number of courses has not been an unmixed good, great improvement has certainly been effected in methods of work. This statement applies to every department and may be verified roughly by a comparison of modern textbooks with those of fifty years ago. In scientific work the changes have been revolutionary. Now student laboratories are universal, and no college may pretend to give scientific instruction without them. Libraries also have grown immensely in size and in usefulness. By improved methods of cataloguing and administration they are made the workshop of every professor and of every student.

5. The personnel of the faculty has also largely changed. While we still reverence the names of many of our great teachers of early days, we must believe that there has been a distinct eleva-

tion of the profession as a whole. German ideals of scholarship have taken hold on all our colleges. The first evils of such a system have been felt in an overestimate of research work and in an attempt to introduce university methods into younger college classes. But we shall react from this error, and we shall find a way to preserve scholarship without pedantry and keep learning in college walls without forgetting the learner.

6. Last of all, I mention the change in college resources without which none of the things already mentioned would have been possible. Since 1870 our country has prospered almost beyond the dreams of our fathers. Great wealth has accumulated in private hands, and the States have had large resources for public needs. Colleges and universities have been especially favored as objects of bounty. The figures when summed up as totals seem almost startling, but if divided among all colleges would not be so very large, and would seem indeed quite small if we take into consideration the number of beneficiaries, the vast and increasing multitude of students that have to be cared for. The richest of our colleges have property amounting to about three million dollars and an annual income of about two hundred and fifty thousand; many are doing most creditable work on less than half that sum. Of course I am speaking now of colleges or of college departments and not of universities with their multiplied demands for technical and professional training. When we consider the history of the American college for the past two hundred and seventy-five years, when we reflect on the greatness of its work, the character of men engaged in it, the results accomplished in the life of our nation, and the uplift of society, we may fairly claim that no expenditures in our country's history have brought such large returns or made such magnificent contributions to public and private welfare.

Present College Problems.

The development of the American college in the past forty years has brought many problems to the front and has been the

occasion of prolonged and serious discussion. The college journals, official presidential reports, educational magazines, daily newspapers, and all forms of fugitive literature have taken part in the conflict. Questions have been raised regarding the purpose, the plan of organization, and the usefulness of the college. At one time and in some quarters it seemed that an attack was to be made on its very existence. While these problems have not all been solved, it may be conceded that we have reached relatively stable ground, we are nearing definite results and are working our way toward agreed conclusions on at least a few points. As some of these questions affect the fundamental character of the college, we may allude to them, even though briefly.

1. Admission to college. We have reached the definite conviction that students should be admitted to college only after the completion of a high school course of four years, covering work amounting to fourteen or fifteen units. Under the helpful leadership of Dr. Pritchett we have agreed on a definition of the term *unit*. We are not agreed as to how far the principle of election shall apply to subjects offered for admission. The high school at first complained of the dominating influence of colleges over their work; now there is little ground for such criticism. The history of the recent past shows one concession after another to the demands of the high school. Reports adopted at the last meeting of the National Education Association and by the High School Teachers' Association of New York City call for the admission to college of any student who has finished an acceptable high school course. The present requirement in mathematics and foreign languages is particularly objected to. Two units in each of these subjects are held to be enough, and provision is demanded for admitting students without any units in either one of the two. The effect of all this on the college course is decided. Greek may be begun in very many institutions of excellent character, and the call will next be, under the system above suggested by the Na-

tional Education Association, for beginners' classes in Latin, algebra, and geometry.

2. Perhaps the greatest struggle has been carried on in reference to the curriculum, the introduction of new subjects, the subdivision of old, the grouping of studies into parallel courses, or the adoption of a system of free electives. This debate has had many phases. At one time the heat of conflict raged around the classics, at another around the historic value and sacredness of the A.B. degree. The whole question is older than 1870. It was foreshadowed in the early history of the University of Pennsylvania and of William and Mary College and brought distinctly to the front in the founding of the University of Virginia. Since 1870 it has forced itself on the consideration of every college faculty. Harvard has been the center of the liberal influence and President Eliot the great advocate of personal freedom. While there is still much division as to details, there are some broad conclusions that have been established and are generally accepted: (1) The rigid college course is gone and no one wishes it restored. (2) New subjects and new courses have been introduced by every college to the extent of its financial ability, and even beyond. No questions of theory have restrained any of us; our limitations are financial alone. (3) The extent to which the individual student shall be allowed to elect his work is still under discussion, and no agreement seems near at hand. Diversity of practice continues and will continue. (4) The typical course is to occupy four years, but many students will accomplish it in three. (5) The degree of A.B. is already permanently changed in character. Some institutions may continue to give B.S., but B.L. and Ph.B. manifest no sign of permanence.

3. A special group of problems has arisen in connection with the size and material resources of colleges. The demands of modern life are imperative. No college can meet the conditions of to-day with the resources and equipment of half a century ago. A college may voluntarily choose a path of renunciation, may re-

fuse to introduce some new subjects or to go to extremes in subdividing old ones; but no college can escape the financial burden involved in providing certain essential laboratories, scientific equipment, and a well-filled library carefully administered. Differences in these matters create institutions of different types. There is the small college, with a faculty of eight or ten, a student body of less than two hundred, and a limited election as far as work is concerned. Then there is the large college, still detached, with larger resources of every kind. Then there is the university-college, a college still, but the center of a great university, exposed to the stimulus as well as the hindrances that come from association with professional work of the most varied character. The differences between these various types are interesting and instructive. The Carnegie Foundation has fixed a minimum of six professors as requisite for a modern college. These might be supported on an annual income of $15,000. This seems pitiably small, and yet there are some colleges that do not reach this standard. But they are not under discussion at present. They are not examples of the modern American college. They are left-over types of the old-fashioned or even of the colonial college—our contemporary ancestors, some have called them.

The *Yearbook* for 1910 says there are in this country 493 institutions of college grade—144 for men and 349 for both men and women. Of this number, 192 have each less than one hundred undergraduate students, 233 have between one hundred and five hundred, 35 have between five hundred and one thousand, and 33 have one thousand and more. The total number of undergraduate students is 153,226, and forty-four per cent of this number are enrolled in the thirty-three institutions having each above one thousand students. Apparently the student trend is to the larger institutions, especially the large State universities, where tuition is free and where vocational and professional ideals influence largely the work of the undergraduate. This tendency has caused some to predict the final dissolution of the detached

American college, its absorption in the high school on the one hand and the university on the other. Dr. Burgess in an essay published in '85 on "The American University" said: "I confess that I am unable to divine what is to be ultimately the position of colleges which cannot become universities and will not be gymnasia. It will be largely a waste of capital to maintain them. It is so now." But in spite of this dire prophecy the position of the college is stronger to-day than it was when Dr. Burgess wrote those words, and every effort is being made to strengthen the private detached college.

Summary.

If we now try to sum up our brief discussion of the modern American college as distinguished from the types of earlier days, we reach the following conclusions:

1. The modern college is the successor of the old college as our typical educational institution, and has inherited all the respect and affection bestowed on that institution for hundreds of years.

2. It has ceased to be vocational in the sense in which earlier institutions were. Of Harvard graduates from 1875 to 1885, fully one-third entered none of the learned professions. A recent class of Harvard College made the following returns as to probable professional careers: Business, 31 per cent; law, 23 per cent; engineering, 12 per cent; teaching, 10 per cent; medicine, 9 per cent; journalism, 4 per cent; architecture, 3 per cent; chemistry, 2 per cent; the ministry, 2 per cent.

3. The college has relaxed some of its claims for the supremacy of mental discipline and has definitely abandoned its rigid curriculum for securing the same. For discipline it has substituted the word "culture," returning to the humanitarian ideas of the Renaissance, and it now makes this the chief end of its being. No one has better expressed this idea than President Hyde in his address before the Congress of Arts and Sciences at the St. Louis

Exposition: "The function of the college, then, is not mental training on the one hand nor specialized knowledge on the other. Incidentally it may do these things at the beginning and at the end of the course as a completion of the unfinished work of the school and a preparation for the future pursuits of the university. The function of the college is liberal education, the opening of the mind to the great departments of human interest, the opening of the heart to the great spiritual motives of unselfishness and social service, the opening of the will to opportunity for wise and righteous self-control. Having a different task from either school or university, it has developed a method and spirit, a life and leisure of its own. . . . I cannot sum up the function of the college better than in words formerly used in reply to the question of a popular journal: 'Does a college education pay?' To be at home in all lands and all ages; to count nature a familiar acquaintance and art an intimate friend; to gain a standard for the appreciation of other men's work and the criticism of one's own; to carry the keys of the world's library in one's pocket and feel its resources behind one in whatever task one undertakes; to make hosts of friends among the men of one's own age who are to be leaders in all walks of life; to lose one's self in generous enthusiasms and coöperate with others for common ends; to learn manners from students who are gentlemen and form character under professors who are Christians—these are the returns of a college for the best four years of one's life."

The following quotation is also very appropriate. It is taken from the second annual report of the Carnegie Foundation: "The American college stands preëminently for that breadth of culture gained in a life of study and play, of comradeship and discipline, of freedom and law, which ought to make up the atmosphere which surrounds a group of teachers and scholars. It is essentially democratic; and if the theory upon which it has grown up is true, it is alike to be commended to rich and poor, to the boy who goes into business as well as to the boy who enters

a profession. Into this atmosphere of comparative freedom the youth enters a boy and goes out a man."

4. This work of liberal culture is entirely within the reach of small detached colleges; and, indeed, they have many advantages for such work which they have not been slow to herald abroad and which strengthen them in the unequal competition with large universities. Their rate of growth in recent years has been more rapid than the rate of increase in population, though not equaling the rate of increase in large State universities.

5. There has been a tremendous growth of nonscholastic interests in college life. These interests attract students more than scholarship. As yet they have not been properly organized and vitalized with the spirit of culture. College faculties have been very busy about many things and very unconcerned about those things to which students have been giving most of their time and thought.

6. The idea of culture has been perverted. The report of the Harvard faculty in 1904 says: "The easiest way to induce students to take a subject for culture is to make it not too difficult." There is some ground of truth even for the bitter criticism of Birdseye: "A mere culture course, unenforced by any common-sense discipline, nor even made interesting by any indication as to its real value to the student's after life, and applied to students fifty per cent of whom are going into business, has too often degenerated into the merest educational farce which might seem as humorous to the older graduate as it does to the undergraduate if one could forget the awful waste that it annually entails among our two hundred and seventeen thousand college and normal school pupils who have on an average forty years of active life before them. . . . The cry is for more culture without any real appreciation that on present lines this means more mental and moral shiftlessness and slouchiness, if not degeneracy, and is the exact antithesis of the aim and spirit of the forefathers as we have found them."

This confusion of opinion regarding the work of the present college has been vividly set forth in a recent work by President William T. Foster. Some of the complimentary epithets passed on present colleges are "a club for idling classes," "a training school for shamming and shirking." The *Nation* says there is hardly a college in the country whose bachelor's degree is a genuine certificate of intellectual discipline. President Foster says: "So great is the confusion of current discussions concerning the American college that an old negro preacher seems unwittingly to have summed it up when he said: 'Education am de great palladium ob our liberties and de pandemonium ob our civilization.'"

7. A reaction is, therefore, under way in the colleges attached to large universities by which the college course is assuming again a vocational aspect and relating itself to the life activities of the individual students. In the same spirit the last years of the college course are dovetailed into the professional schools, so that in effect the college course is shortened one year. This is developing a type of college different from anything heretofore known and increasingly popular. Between this university-college and the detached college of strictly cultural ideals differences are likely to increase. It is not possible at the present moment to forecast the outcome of this issue or indicate possible modifications and compromises in the evolution of both institutions.

The mention of this last item brings us by a natural transition to the consideration of

The American University.

This institution has within the present generation rapidly assumed a definite form and type. This type differs essentially from that of the historic English universities and equally so from those of Germany. Some years ago Dr. Von Holst delivered an address and published an article on "The Need of Universities in the United States." In this article he took occasion to deny

the existence of any university in this country. Practically the same position was taken by Dr. Burgess, of Columbia University, in his paper published in 1885, already quoted from, on "The American University: When Shall It Be? Where Shall It Be? What Shall It Be?" We may at once frankly admit that the German university does not exist, because the social order out of which that university sprung is foreign to us. But there is no necessity inhering in the order of things that requires all universities to be molded after the German type. That type itself is an evolution, reflecting social and intellectual changes. Professor Paulsen well says: "I have repeatedly pointed out that the classification of the faculties was not made from the viewpoint of a theoretic division of the sciences, but developed out of social necessities and historic conditions. Society needed and still needs scientifically trained clergymen, judges, physicians, and teachers. Thus regarded, the university is nothing more than a loose coordination of professional schools." In view of these facts we have no apology to make for our present use of the term "university" to describe the highest class of our educational institutions, a form of development that has taken place within the life period of the new American college and is, in fact, associated with and dependent on that very evolution of the college already described. In a brief sketch of this American university popular imagination seizes on a few marked characteristics. These institutions are uniformly of great size and of immense resources. Their development has been in the main quite rapid, and they have included under one organization a great diversity of educational interests and activities. Further, in almost all cases they have been built up around the American college, and include this as one of the most important parts of their organization. These characteristics may be illustrated by a few statistics. Attendance on our larger universities has rapidly risen within the last decade. Institutions having above four thousand students are quite numerous, and more than five thousand are reported from

Pennsylvania, Minnesota, Michigan, Illinois, Chicago, Cornell, and Columbia. Columbia has an enrollment of seven thousand nine hundred and eighty-one in the catalogue for 1911-12. But in 1885 Minnesota was reported as having only fifty-four students, Illinois only two hundred and forty-seven, Michigan five hundred and twenty-four, and Wisconsin three hundred and thirteen. The income of Columbia in 1909 was $2,207,501. Many State universities have an income exceeding one million dollars. Such are California, Cornell, Illinois, Pennsylvania, Michigan, Minnesota, Wisconsin. Seven institutions report endowments exceeding ten millions, and thirty-seven between one and ten millions. All of the better class of State Universities have possible resources from State taxation equal to many millions of endowment. The writer of the article on "Education" in the *Yearbook* for 1910 says: "Practically there are at least ten institutions of higher learning of first magnitude in this country and at least thirty others that are well equipped for modern requirements." In view of these facts we may agree with the statement on this subject in the second annual report of the Carnegie Foundation: "We may say with confidence that since 1870 there has been developed in the United States a distinctive form of university, similar in its organization to the German university, consisting of one or more colleges upon which a graduate school of philosophy is superposed and with professional schools likewise resting on the colleges or related to them."

Let us examine now some of the influences at work molding and shaping these American universities, some of the tendencies represented in their growth and organization.

1. They represent in their college departments the extreme movement for enlarging the curriculum. This phase of development especially characterizes the State universities. They were the first to feel the limitations of the classical curriculum and to demand greater freedom. Offering for the most part free tuition, they have attracted large numbers of students, and these stu-

dents look toward more practical subjects than the language and literature of ancient Greece. As the culmination of the public school system, these institutions have borne a relation of peculiar intimacy to the public high school, and have, therefore, been the first to respond to the demands for wider admission requirements and the largest possible choice of subjects afterwards.

2. The great State universities have led in the movement for scientific technical courses parallel with or a part of the college course. The need of such technical instruction stimulated the founding of special schools of applied science or technology. Then came the association of such work with existing institutions, as in the Lawrence School at Harvard and the Sheffield School at Yale. But the most effective impulse in this direction came with the passage of the Morrill Act in 1862. Many of our strongest State universities owe their origin to this act.

The extent to which these technical courses have been multiplied may be seen by studying university catalogues. The most popular are courses in engineering—civil, mechanical, electrical, mining, metallurgical, marine, sanitary, railway, textile, chemical. Columbia University offers in the Department of Science seven separate professional courses in engineering, also courses in architecture and applied chemistry, besides many others in practical science not distinctly vocational and not yet elevated or elaborated into degree courses. This movement is sure to continue. Whatever phases of industrial or commercial life lend themselves to careful institutional instruction are sure to be incorporated into some university curriculum. Already we have new departures in schools of forestry, of commerce, of diplomacy, and of journalism. Some of these admit minute subdivisions, which will come in course of time. Instead of a recession from the line of development here described, it is likely that the example of America in this particular will be followed by other nations.

3. Another movement of great significance has been the development of graduate courses of study in connection with re-

search work of a high character. Definite departments for this purpose have been built up only since 1870. The founding of Johns Hopkins University marks an epoch in this field. The whole movement is an index of the influence of German universities on the higher education of America, and has been extended by men who were themselves trained in German universities. Year by year the number of students seeking such instruction has increased. In 1871 there were only one hundred and ninety-eight graduate students in all our institutions. In ten years this number had increased to five hundred, but in 1900 to six thousand, and at present to nearly nine thousand. Columbia, Chicago, Harvard, and Yale lead all the institutions in the number and variety of these students. Work of this kind is the life and inspiration of the university. It is the one feature that cannot be dispensed with. It is the supreme obligation of the whole university plant. Its contributions are made to practical life and to abstruse theory. It concerns itself with the best method of preparing food for the table or of most accurately measuring the distances of the fixed stars. It is that form of discipline that is demanded specifically of men who aspire to fill places in our colleges and universities. This practical professional value of graduate study accounts in a measure for the large increase in the number of students. Perhaps we have unduly stimulated the supply. It is possible that the instruction in colleges has suffered through the attempt to introduce university methods—natural mistakes of enthusiastic specialists. But none the less do we exalt this field of human endeavor and recount with pride the achievements of our greatest institutions. Smaller institutions should not attempt to contest their preeminence. Colleges are not called to enter into such competition. Graduate work is costly above all work. Let it be left to those institutions that have the means provided for its development.

4. Universities have also in the recent past become the homes of great professional schools. The development of colleges as instruments of general culture stimulated the establishment of

UNIV. OF CALIFORNIA

special institutions for the higher professions of theology, medicine, and law. In the first quarter of the past century there were established eighteen schools of theology, twelve of medicine, and three of law; in the second quarter, twenty-five of theology, twenty-two of medicine, and seven of law; in the third quarter, seventy-two of theology, thirty-three of medicine, and twenty-four of law; in the fourth quarter, forty-seven of theology, eighty-six of medicine, and fifty of law. These figures count only schools now existing, and make no distinction between independent professional schools and those connected with universities. Theology naturally has been forced to seek independent development. Medicine and law in recent years manifest a strong tendency to come into close affiliation with great universities. This results from the increase in requirements in these professional schools. So long as medical education was a simple matter of a few didactic lectures the conduct of a medical school was a profitable business and many private schools arose as business ventures. But now that modern methods of instruction have been introduced, with laboratories and hospital, it has become one of the most expensive departments of instruction, and must be left either to the State or to universities with large resources of endowment. Requirements for admission have been so raised as greatly to strengthen the college. While few medical colleges require the baccalaureate degree for admission, a large and increasing number require the completion of two college years. This helps both the college and the professional school and binds them together. While formerly the professional departments were very loosely connected with the university organization, to-day they are looked after with the same care and concern as the college department or the graduate work.

5. As the last distinctive tendency of the modern American university, mention may be made of its development as an instrument of service for the larger public outside its walls. This service is rendered in innumerable ways and under a variety of names.

In educational lines the university stimulates, develops, and organizes the whole educational system of the State. In the field of general culture it maintains courses of lectures, organizes reading circles, and builds up the intellectual life of the city where it is located. Its laboratories of science are busy with the problems of its own environment. The great State universities of Illinois, Michigan, Wisconsin, and others make a marvelous showing of contributions made to the agricultural and commercial welfare of the State. The improvement may be in a new variety of seed, a new method of cultivation, a successful manner of resisting some insect enemy, as the white scale or the boll weevil, or in a new scientific invention or discovery. These contributions may come also through publications, literature sent out on social and economic questions. In a thousand ways the modern university seeks to make itself the leader of thought and of action and at the same time the servant of all. This explains the great and growing value of such an institution to the State or to a city where it is located.

Our hasty survey has reached its end and limit. The story told in simplest form and phrase is one to excite the wonder and admiration of all men. It is in keeping with the great movements of history on this American Continent. Our institutions of higher education measure and gauge the intellectual life of our people. They are at once the record of our past and the hope and prophecy of our future. As they are strong, so shall be the strength of our nation; as they fail, so shall disaster encompass us.

THIS BOOK IS DUE ON THE LAST DATE STAMPED BELOW

AN INITIAL FINE OF 25 CENTS

WILL BE ASSESSED FOR FAILURE TO RETURN THIS BOOK ON THE DATE DUE. THE PENALTY WILL INCREASE TO 50 CENTS ON THE FOURTH DAY AND TO $1.00 ON THE SEVENTH DAY OVERDUE.

DEC 3 1943

MAY 7 1947

AUTO DISC CIRC NOV 22 '93

24Jan'52WB

Jan30'52LU

DEC 06 1992

LIBRARY USE ONLY

NOV 06 1992

CIRCULATION DEPT.

AUTO DISC CIRC JAN 22 '93

DEC 09 1993

NOV 06 1993

LD 21–100m-7,'39(402s)

U. C. BERKELEY LIBRARIES
C042455510

267673
Kirkland
LC 1011
K4
UNIVERSITY OF CALIFORNIA LIBRARY